

Title (en)
Filter laminates.

Title (de)
Filterlaminate.

Title (fr)
Laminés pour filtration.

Publication
EP 0391660 A2 19901010 (EN)

Application
EP 90303553 A 19900403

Priority

- US 33506689 A 19890407
- US 41194189 A 19890925

Abstract (en)
An expanded porous polytetrafluoroethylene (PTFE) membrane (11) is employed in laminar conjunction with a polytetrafluoroethylene felt (13); in which the felt (13) is reinforced with a woven scrim (14).

IPC 1-7
B01D 39/16; B01D 71/36

IPC 8 full level
B01D 39/16 (2006.01); **B01D 39/08** (2006.01); **B01D 69/10** (2006.01); **B01D 71/36** (2006.01); **B32B 5/24** (2006.01); **B32B 27/12** (2006.01);
B32B 27/30 (2006.01)

CPC (source: EP US)
B01D 39/083 (2013.01 - EP US); **B01D 69/1071** (2022.08 - EP US); **B01D 71/36** (2013.01 - EP US); **B32B 5/06** (2013.01 - US);
B32B 5/18 (2013.01 - US); **B32B 5/245** (2013.01 - US); **B32B 5/26** (2013.01 - US); **B32B 7/12** (2013.01 - US);
B32B 27/12 (2013.01 - EP US); **B01D 2239/0471** (2013.01 - EP US); **B01D 2239/065** (2013.01 - EP US); **B01D 2239/0654** (2013.01 - EP US);
B01D 2239/0659 (2013.01 - EP US); **B01D 2239/0681** (2013.01 - EP US); **B01D 2239/1258** (2013.01 - EP US);
B32B 2262/0253 (2013.01 - US); **B32B 2266/025** (2013.01 - US); **B32B 2307/724** (2013.01 - US); **B32B 2437/00** (2013.01 - US);
Y10T 428/1334 (2015.01 - EP US); **Y10T 428/1366** (2015.01 - EP US); **Y10T 428/24996** (2015.04 - EP US); **Y10T 428/249981** (2015.04 - EP US);
Y10T 428/249985 (2015.04 - EP US); **Y10T 428/31544** (2015.04 - EP US); **Y10T 442/159** (2015.04 - EP US)

Cited by
US2018345190A1; DE102008014452C5; EP0641588A1; CN103432827A; GB2477846A; GB2477846B; US5743775A; EP0629559A1;
GB2476356A; AU760015B2; US5947918A; DE10335735A1; KR20110094014A; EP1266681A3; EP1674255A1; CN102317519A; RU2469132C1;
EP0641594A1; US5462586A; EP2221096A4; GB2311237A; GB2311237B; AU711872B2; US6143675A; DE102007054199B3; CN102317520A;
RU2469133C1; US5527569A; CN111629807A; AU2017439374B2; US10493388B2; US6517919B1; EP2772293A1; CN108472567A;
WO2010080126A1; WO2010080127A1; WO2009062666A1; WO9640510A1; WO2008084233A1; WO0002639A3; EP1266681A2; US6808553B2;
DE102008014452A1; DE202008017671U1; DE202010010639U1; US8388718B2; US8900351B2; US8282713B2; GB2320449A; DE4303765A1;
GB2263883A; GB2263883B; DE4303765C2; US9108163B2; WO2014131864A3; WO2017106730A1; WO9211924A1; US10994237B2;
US11602711B2; WO9215382A3; WO2012078884A3; WO2019094042A1; WO2007019350A3; WO9316875A1; EP3041596B1; EP2214800B1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0391660 A2 19901010; EP 0391660 A3 19910130; EP 0391660 B1 19940112; AT E99977 T1 19940115; AU 617259 B1 19911121;
AU 6848690 A 19911121; DE 69005871 D1 19940224; DE 69005871 T2 19940526; DK 0391660 T3 19940411; ES 2048430 T3 19940316;
JP H0368409 A 19910325; US 4983434 A 19910108

DOCDB simple family (application)
EP 90303553 A 19900403; AT 90303553 T 19900403; AU 6848690 A 19901227; AU 6848690 D 19901227; DE 69005871 T 19900403;
DK 90303553 T 19900403; ES 90303553 T 19900403; JP 9048090 A 19900406; US 41194189 A 19890925